The innovative design of the Sterling Series of Screw presses is a result of Rosedowns industry experience and knowledge, which has been gained over many years as one of the world leaders in the field of Oils and Fats.

Increasing global demand for Oils and Fats has led to a new generation of processing plants, which regardless of their capacity or business model, demand the highest levels of reliability and performance.

The 400 Series is the mid range press and able to take advantage of many markets and applications. With rigorous high standards for design and manufacture it more than meets your needs; to deliver world class performance and reliability for minimum investment.

With added value options and flexibility of installation, the 400 Series can be manufactured and delivered to meet your requirements, offering both independent and multi-national companies genuine benefits in achieving optimum results.

For further information contact the De Smet Rosedowns Sales Department.

Typical Duty
Pre Press: 250 -350 TPD
Full Press: 45 -55 TPD
Rendering: 4 -5 TPH Cake
400 Series Sterling  Pressing Excellence

Design Basis

High Reliability
Reliability is paramount for the Sterling Series. Mechanical drive components are deliberately separated from the working areas of the press to help maintain a clean and cool environment and preserve the life of bearings and the gearbox. With the addition of high service factors, costly breakdowns and disruption to plant operation are minimised.

Maintenance Friendly
When maintenance is necessary it is essential to have good access to enable repairs and upgrades to be completed quickly and with ease. The Sterling Series has been designed with this in mind from the outset and major wearing components can be easily removed; the press cages lower to the horizontal position making cage lining quick and easy. Removable covers around the cake discharge area also enable good access for lifting equipment to be used to handle the worm assembly components.

Flexible Layout & Installation
The handling of the Gearbox, the Oil / Fat outlet, the position and the length/orientation of the Feeder can all be manufactured to suit the plant layout and surrounding equipment. (Dimensional limits apply). The option for drive via belts or flexible tyre coupling, and the option to add a sub frame also offers maximum flexibility and ease of installation.

Value Added Options
Options for the Sterling Series Presses include the addition of a Cake Breaker, Barring Motor, 'Compress V' Control System and Worm Shaft Cooling, all of which are designed to optimise the operation and performance of the press for your specific requirements.

Key Features

Feed Assembly
Comprising a horizontal metering screw and a vertical feeding screw, the Feed Assembly ensures a reliable and consistent delivery of process material to the working area of the press. Manufactured in Stainless Steel, the Feed Assembly is also designed for longevity.

Worm Assembly
Using state of the art design tools, coupled with an analytical approach based on vast experience, the Worm assembly designs are capable of giving maximum oil yield for minimum power use. With a choice of Case Hardened, Gold Star or Hard Faced materials the assembly can be manufactured to meet your specific processing requirements and provide maximum wear life.

Gearbox & Thrust Assembly
An in-line helical gearbox with high thermal and mechanical ratings provides a reliable drive solution. Coupled with a specially designed Thrust Assembly and the option to add external cooling where necessary, the drive arrangement of the Sterling Series gives superior reliability and ease of maintenance.

Discharge End Bearing
Designed for situations when no process material is present, the Discharge End Bearing protects the major wearing components of the Sterling Series. It also prevents unwanted forces being applied to the drive arrangement by excessive movement of the Worm Shaft.

Covers
Manufactured in Stainless Steel and designed to allow inspection of the press, the covers help make operation of the press as easy as possible. They are also easily removable to expose the vital areas of the press when maintenance is necessary.

Technical Specifications

Dimensions:
- Length: 4,000 mm (excluding main motor)
- Frame Width: 1,000 mm
- Max Width: 1,365 mm
- Frame Height: 1,500 mm
- Inlet Height: 1,900 mm (min)
- Cage Bore: 300 mm

Weight:
- Overall Press: 12,500 kg
- Half Cage: 2,000 kg
- Worm Assy: 750 kg
- Gearbox: 1,900 kg

Installed Power: (Subject to application)
- Main Motor: 150 - 250 kW (200 - 330 HP)
- Base Conveyor: 0.75 kW (1.0 HP)
- Vertical Feeder: 3.0 kW (4.0 HP)
- Horizontal Feeder: 1.5 - 3.0 kW (2.0 - 4.0 HP)
- Cake Breaker: 3.0 kW (4.0 HP)
- Barring Motor: 7.5 kW (10 HP)
- Gearbox Oil Cooler: 2.2 kW (3.0 HP)